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10/790,522	03/01/2004	Seth M. Demsey	MS306914.01 / MSFTP571US	9910
27195 7590 10/30/2008 AMIN, TUROCY & CALVIN, LLP 127 Public Square			EXAMINER	
			NGUYEN, VAN H	
57th Floor, Key Tower CLEVELAND, OH 44114			ART UNIT	PAPER NUMBER
			2194	
			NOTIFICATION DATE	DELIVERY MODE
			10/30/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)
	10/790,522	DEMSEY ET AL.
Office Action Summary	Examiner	Art Unit
	VAN H. NGUYEN	2194
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tirwill apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on <u>01 J</u> 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under <u>B</u>	s action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1.2 and 4-39 is/are pending in the ap 4a) Of the above claim(s) 34-37 is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1.2.4-33.38 and 39 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers	wn from consideration.	
9) The specification is objected to by the Examine	ar.	
10) The drawing(s) filed on is/are: a) accomposition and accomposition accomposition and accomposition accomposition and accomposition accomposition and accomposition	cepted or b) objected to by the drawing(s) be held in abeyance. Set tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D: 5) Notice of Informal F 6) Other:	ate

DETAILED ACTION

1. Applicant's election of group I (claims 1, 2, 4-33, 38, and 39) in the reply filed on 07/01/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1, 2, and 4-39 are pending in this application. Claims 1, 2, 4-33, 38, and 39 are elected for examination.

Applicant is required to cancel non-elected claims 34-37 in the next response to this office action.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

2. Claim 32 is objected to because of the following minor informalities:

"returning a one or more responses" should read "returning one or more responses".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 2, 4-33, 38, and 39 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding independent claim 1, the claim recites a "**system**" comprising "a performance-based interface" and "a filter component". As currently recited the "system" comprises only computer software element(s). Thus, the claim is a program per se and does not fall within any of the four enumerated categories of patentable subject matter in section 101.

For the same reasons discussed supra with respect to independent claim 1, dependent claims 2 and 4-18 fall outside the scope of § 101.

Regarding dependent claim 9, the Examiner notes that a computer-readable medium having stored thereon computer-executable instructions is directed to statutory subject matter so long as the language of the claim is not supported in the Specification with non-statutory embodiments (i.e., signals, transmission mediums and the like). See In re Nuijten, 500 F.3d 1346, 1357 (Fed. Cir. 2007) (A claim directed to computer instructions embodied in a signal is not statutory under 35 U.S.C. § 101).

In the present case, Applicant's Specification discloses that the computer readable medium (that includes signal bearing media) is intended to broadly encompass "a modulated data signal such as a carrier wave." (Spec. page, 15). Because Applicant's claims broadly read on signals and other non tangible transmission mediums, the Examiner concludes that claim 9 is directed to non-statutory subject matter.

Regarding independent claim 19, the claim recites a "system" comprising "a managed code framework", "a native code framework", "a performance-based interface" and "a filter component". As currently recited the "system" comprises only computer software element(s). Thus, the claim is a program per se and does

not fall within any of the four enumerated categories of patentable subject matter in section 101.

For the same reasons discussed supra with respect to independent claim 19, dependent claims 20-28 fall outside the scope of § 101.

Regarding independent claim 29, the Examiner notes that a computer-readable medium having computer-executable instructions is directed to statutory subject matter so long as the language of the claim is not supported in the Specification with non-statutory embodiments (i.e., signals, transmission mediums and the like). See In re Nuijten, 500 F.3d 1346, 1357 (Fed. Cir. 2007) (A claim directed to computer instructions embodied in a signal is not statutory under 35 U.S.C. § 101).

In the present case, Applicant's Specification discloses that the computer readable medium (that includes signal bearing media) is intended to broadly encompass "a modulated data signal such as a carrier wave." (Spec. page, 15). Because Applicant's claims broadly read on signals and other non tangible transmission mediums, the Examiner concludes that independent claim 29 and claims 30-31 that depend therefrom are directed to non-statutory subject matter.

Regarding independent claim 32, the language of independent claim 32 raises a question as to whether the claim is directed merely to an abstract idea that is not

tied to a technological art, environment or <u>machine</u> which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Independent claim 32 does not appear to require any computer hardware to implement the claimed invention. These claims appear to define the metes and bounds of an invention comprised solely of software.

If the "acts" of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter. <u>In re Schrader</u>, 22 F.3d 290 at 294-95, 30 USPQ2d 1455 at 1458-59 (Fed. Cir. 1994).

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." <u>State Street</u>, 149 F.3d 1368, 1373, 47 USPQ2d 1596 at 1601-02 (Fed. Cir. 1998). MPEP 2106. However, <u>State Street</u> does not hold that a "useful, concrete and tangible result" alone, without a machine, is sufficient for statutory subject matter.

Dependent claim 33 is rejected for fully incorporating the deficiencies of their base claim.

Regarding independent claim 38, the claim recites a "system" comprising "means for receiving", "means for notifying", "means for returning", "means for filtering", and "means for transmtting". As currently recited the "system" comprises only computer software element(s). Thus, the claim is a program per se and does not fall within any of the four enumerated categories of patentable subject matter in section 101.

For the same reasons discussed supra with respect to independent claim 38, dependent claim 39 falls outside the scope of § 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-33, 38, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by **Demsey et al.** (US 20040098731 A1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

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under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claim 1:

Demsey teaches a system that facilitates a performance enhancement in messagebased computing, comprising:

- a performance-based interface across which a request from a source is transmitted to a destination ([0016]-[0019] and [0034]-[0036]); and
- a filter component in communication with the destination that dynamically allows only one or more relevant responses from the destination to transition the interface to the source, the filter component is part of at least one of native code and managed code ([0018], [0047]-[0048], and [0061]-[0072]).

As to claim 2:

Demsey teaches the source comprises at least one of native code and managed code, and the destination comprises at least one of native code and managed code ([0016] and [0047]-[0048]).

As to claim 4:

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Demsey teaches the destination issues a callback to the source, in response the

filter component permits only a relevant response to the callback to be transmitted

to the destination [0047]-[0048], and [0061]-[0072]).

As to claim 5:

Demsey teaches the filter component is integrated into an operating system

([0032]-[0038]).

As to claim 6:

Demsey teaches in a small footprint execution environment that has reduced

resources ([0015]-[0016]).

As to claim 7:

Demsey teaches the source is part of a managed code framework that includes a

graphical user interface application that transmits an event for processing by the

destination, which destination is part of native code ([0041]-[0048]).

As to claim 8:

Demsey teaches a classifier that makes an inference about processes that can be

automatically performed ([0041]-[0048]).

As to claim 9:

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Demsey teaches computer readable medium having stored thereon computer

executable instructions ([0022] and [0118]).

As to claim 10:

Demsey teaches a computer ([0022]).

As to claim 11:

Demsey teaches server ([0022]).

As to claim 12:

Demsey teaches the source is associated with a GUI such that the request receives

only the one or more responses from a graphics/windowing/events system that are

relevant to the request ([0041]-[0048]).

As to claim 13:

Demsey teaches the source notifies a native layer that an event handler has

attached or detached ([0018], [0047]-[0048], and [0061]-[0072]).

As to claim 14:

Demsey teaches the filter component is notified by the source when an event

handler has attached to or detached from a source object, and forwards the one or

more responses only when the associated event handlers are attached ([0018],

[0047]-[0048], and [0061]-[0072]).

As to claim 15:

Demsey teaches the source can dynamically inspect at least one of properties, methods, and events implemented on a source object ([0041]-[0048]).

As to claim 16:

Demsey teaches the source utilizes reflection during initialization of an object to determine the presence of a custom object ([0041]-[0048]).

As to claim 17:

Demsey teaches the source utilizes reflection during initialization of an object to determine if message handling has been modified in a custom object ([0041]-[0048]).

As to claim 18:

Demsey teaches the source utilizes type introspection to determine the presence of a custom object, in response to which the destination is notified that a message associated with the custom object is of interest and will be forwarded from the destination for a lifetime of the custom object ([0041]-[0048]).

As to claim 19:

Demsey teaches a system that facilitates a performance enhancement in messagebased computing, comprising:

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a managed code framework that generates a request ([0015]-[0016] and [0029]-[0034]);

- a native code framework that receives the request and issues one or more responses thereto ([0015]-[0016] and [0029]-[0034]);
- a performance-based interface between the managed code framework and the native code framework across which the request is passed and the one or more responses are transmitted ([0016]-[0019] and [0034]-[0036]); and
- a filter component in communication with the native code framework that dynamically allows only one or more relevant responses of the native code framework to transition the interface to the managed code framework ([0018], [0047]-[0048], and [0061]-[0072]).

As to claim 20:

Demsey teaches the filter component is part of the native code framework ([0018], [0047]-[0048], and [0061]-[0072]).

As to claim 21:

Demsey teaches the filter component only allows the one or more responses across the interface that are relevant to the request ([0018], [0047]-[0048], and [0061]-[0072]).

As to claim 22:

Demsey teaches a managed code filter component that is part of the managed

code framework ([0018], [0047]-[0048], and [0061]-[0072]).

As to claim 23:

Demsey teaches comprising a managed code filter component that is part of the

managed code framework, which managed code filter processes a callback from

the native code framework and only forwards responses from the managed code

to the native code that are relevant to the callback [0047]-[0048], and [0061]-

[0072]).

As to claim 24:

Demsey teaches the filter component only processes events that are registered

([0018]-[0021], [0047]-[0048],and [0061]-[0072]).

As to claim 25:

Demsey teaches the filter component is notified by the managed code framework

when an event handler has at least one of registered and unregistered from a

managed object, and forwards the one or more responses only when the

associated event handlers are registered ([0018], [0047]-[0048], and [0061]-

[0072]).

As to claim 26:

Demsey teaches the managed code framework source utilizes type introspection

during initialization of an object to determine the presence of a custom object

([0041]-[0048]).

As to claim 27:

Demsey teaches the managed code framework utilizes type introspection during

initialization of an object to determine if message handling has been modified in a

custom object ([0041]-[0048]).

As to claim 28:

Demsey teaches the managed code framework utilizes type introspection to

determine the presence of a custom object, in response to which the native code

framework is notified that a message associated with the custom object is of

interest and will be forwarded from the native code framework for a lifetime of

the custom object ([0041]-[0048]).

As to claim 29:

Demsey teaches a computer-readable medium having computer-executable

instructions for performing a method of managing messages across a

performance-based interface, the method comprising:

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• receiving the performance-based interface across which a request from a source is transmitted to a destination ([0016]-[0019] and [0034]-[0036]);

- returning one or more responses to the request from the destination ([0018]-[0021], [0047]-[0048], and [0061]-[0072]);
- filtering the one or more responses to allow only responses that are relevant to the request; and transmitting the relevant responses across the interface to the source ([0018]-[0021], [0047]-[0048], and [0061]-[0072]).

As to claim 30:

Demsey teaches the act of filtering occurs on the destination side of the interface [0047]-[0048]).

As to claim 31:

Demsey teaches *at least one of the acts of*: transmitting the relevant responses according to priority criteria; transmitting a request from the destination to the source; filtering the one or more responses to allow only responses from the source that are relevant to the request; and transmitting the relevant responses across the interface to the destination ([0018]-[0021], [0047]-[0048], and [0061]-[0072]).

As to claim 32:

Demsey teaches method of managing messages across a performance-based interface, comprising:

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• receiving the performance-based interface between a managed code and a native code ([0016]-[0019] and [0034]-[0036]);

- registering an event handler for an event of a managed object ([0016]-[0019] and [0034]-[0036]);
- notifying the native code that the event handler is registered ([0018]-[0021], [0047]-[0048], and [0061]-[0072]);
- returning one or more responses of the native code associated with the event ([0018]-[0021], [0047]-[0048], and [0061]-[0072]);
- filtering the one or more responses of the native code to determine the relevant responses associated with event ([0018]-[0021], [0047]-[0048], and [0061]-[0072]); and
- transmitting the relevant responses across the interface to the managed code only when the associated event handler is registered ([0018]-[0021], [0047]-[0048], and [0061]-[0072]).

As to claim 33:

Demsey teaches tracking the attached event with the native code ([0061]-[0072]).

As to claim 38:

Note the rejection of claim 32 above. Claim 38 is the same as claim 32, except claim 38 is a system claim and claim 32 is a method claim.

As to claim 39:

Demsey teaches means for unregistering the one or more event handlers when the

Response to Arguments

5. Applicant's arguments with respect to claims 1, 2, 4-33, 38, and 39 have been considered but are moot in view of the new ground(s) of rejection.

associated events have expired ([0061]-[0072]).

Conclusion

6. The prior art made of record, see PTO 892, and not relied upon is considered pertinent to applicant's disclosure. Applicant should review these references carefully before responding to this office action.

Contact Information

7. Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM-6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MENG-AI AN can be reached at (571) 272-3756.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VAN H NGUYEN/ Primary Examiner, Art Unit 2194